

WHAT IS CLAIMED IS:

1 1. In a vehicle having a passenger compartment, an instrument panel
2 system comprising:
3 an instrument panel;
4 a control panel attachable to the instrument panel, the control panel
5 comprising a plurality of switches for use by an occupant in the passenger
6 compartment to control at least one vehicle system; and
7 an illumination source for selectively illuminating at least one of the
8 plurality of switches, wherein each of the plurality of switches is visible to the
9 occupant only when illuminated by the illumination source.

1 2. The instrument panel system of claim 1 wherein the
2 illumination source comprises a projector for projecting light onto the plurality of
3 switches.

1 3. The instrument panel system of claim 2 wherein the projector
2 is to be located in the passenger compartment.

1 4. The instrument panel system of claim 3 wherein the projector
2 projects images onto surfaces associated with the plurality of switches, the
3 associated surfaces visible to the occupant.

1 5. The instrument panel system of claim 4 wherein the projector
2 further projects an additional image onto a surface of the instrument panel visible
3 to the occupant, the surface of the instrument panel and the projected additional
4 image acting as a display for conveying information to the occupant.

1 6. The instrument panel system of claim 4 wherein the projector
2 further projects an additional image onto a surface of the control panel visible to the
3 occupant, the surface of the control panel and the projected additional image acting
4 as a display for conveying information to the occupant.

1 7. The instrument panel system of claim 2 wherein each of the
2 plurality of switches is substantially transparent and the projector projects images
3 onto the plurality of switches, the images visible to the occupant.

1 8. The instrument panel system of claim 7 wherein the projector
2 further projects an additional image onto a substantially transparent surface of the
3 instrument panel, the substantially transparent surface of the instrument panel and
4 the projected additional image acting as a display for conveying information to the
5 occupant.

1 9. The instrument panel system of claim 7 wherein the projector
2 further projects an additional image onto a substantially transparent surface of the
3 control panel, the substantially transparent surface of the control panel and the
4 projected additional image acting as a display for conveying information to the
5 occupant.

1 10. The instrument panel system of claim 1 wherein the
2 illumination source is a plurality of light emitting diodes in proximity to the plurality
3 of switches.

1 11. The instrument panel system of claim 1 wherein each of the
2 plurality of switches comprises a touch activated field effect switch.

1 12. The instrument panel system of claim 1 wherein each of the
2 plurality of switches comprises a membrane switch.

1 13. The instrument panel system of claim 1 further comprising a
2 control module to be provided in communication with the control panel and the
3 illumination source, the control module for selectively interfacing the control panel
4 with the at least one vehicle system to be controlled, and for controlling the
5 illumination source to selectively illuminate at least one of the plurality of switches
6 based on the at least one vehicle system to be controlled.

1 14. The instrument panel system of claim 1 wherein each of the
2 plurality of switches comprises at least one icon for illumination by the illumination
3 source.

1 15. The instrument panel system of claim 14 wherein the at least
2 one icon comprises a plurality of icons, each of the plurality of icons associated with
3 one of a plurality of vehicle systems.

1 16. The instrument panel system of claim 15 wherein each of the
2 plurality of switches comprises at least one icon for illumination by the illumination
3 source, and wherein the control module selectively illuminates the at least one icon
4 based on the at least one vehicle system to be controlled.

1 17. In a vehicle having a passenger compartment, an instrument
2 panel system comprising:
3 an instrument panel;
4 a control panel attachable to the instrument panel, the control panel
5 comprising a plurality of switches for use by an occupant in the passenger
6 compartment to control a plurality of vehicle system, each of the plurality of
7 switches having a plurality of icons associated therewith, each icon associated with
8 one of the plurality of vehicle systems; and
9 an illumination source for selectively illuminating the plurality of
10 icons, wherein each of the plurality of switches is visible to the occupant only when
11 an associated icon is illuminated by the illumination source.

1 18. The instrument panel of claim 17 wherein each of the plurality
2 of switches includes an audible actuation notification to provide the occupant with
3 an indication of actuation of the switch.

1 19. The instrument panel system of claim 18 further comprising
2 a control module to be provided in communication with the control panel and the
3 illumination source, the control module for selectively interfacing the control panel

4 with at least one of the plurality of vehicle systems to be controlled, and for
5 controlling the illumination source to selectively illuminate at least one of the
6 plurality of icons based on the at least one of the plurality of vehicle system to be
7 controlled.

1 20. The instrument panel system of claim 19 wherein the
2 illumination source is a projector for projecting light onto the plurality of switches.